WILDLIFE MANAGEMENT UNIT 25A - PLATEAU, FISH LAKE

Boundary Description

Sevier, Wayne and Piute Counties - Boundary begins at Highway SR-24 and Highway SR-72; west and north on SR-24 to Highway US-89; north on US-89 to Interstate 70; east on I-70 to SR-72; south on SR-72 to SR-24 and beginning point.

Unit Description

Prior to 1998, the Fish Lake unit was called deer herd unit 44. In the spring of 1998 this unit was enlarged, now it is a subunit within the large Wildlife Management Unit 25 - Plateau. This wildlife management unit now incorporates the Boulder Mountains (25C), Thousand Lake Mountains (25B), and the Fish Lake Mountains (25A).

The Fish Lake unit includes Fish Lake Mountain and drainages; Otter Creek to the west and the Fremont River with its major tributaries, 7-mile Creek and UM Creek to the east. Some steep, relatively rough areas exist in the drainage heads along the northwestern side, but most of the unit is an inclined, rolling plateau. Elevation ranges from 11,599 feet on Mt. Marvine to 7,040 feet at Loa. The northern two-thirds of the unit includes the higher elevations of the Fish Lake Mountains and constitutes summer range for deer and elk. Winter range is primarily confined to the lower elevations of the southern third of the unit and the sagebrush benches on the west side above Highway 24. Antelope are present and are normally found in the more open areas of the deer and elk winter range. Sage grouse are found near water in the same areas as those used by antelope. Fish Lake, Johnson Reservoir, Mill Meadow Reservoir, and Forsyth Reservoir are all popular summer fishing and camping areas. The higher portions of the unit are also popular elk and deer hunting areas. Another major public land use of the area is livestock grazing.

Huff and Blotter (1964) identified four dominant vegetation types on the winter range. Sagebrush was the most prevalent type. Black sagebrush (*Artemisia nova*) was the dominant species with islands of big sagebrush (*A. tridentata*) scattered throughout. Pinyon-juniper was the second most common vegetation type. Pinyon-juniper occupies primarily southern slopes at higher elevations and is dispersed in patches throughout the lower elevations. Mountain brush can be found along the upper limits of the winter range. The mixed types occur in localized areas throughout the winter range.

The normal winter range can be found between 7,200 and 9,000 feet (Huff and Blotter 1964). Excessive accumulations of snow during severe winters confine deer below the 8,600-foot contour. Pinyon-juniper on both normal and severe wintering areas provide extremely important protective cover for elk and deer, while the closely associated sagebrush type produces the bulk of the required forage. In an update on winter range needs in the state, Mann (1985) considered the public land on the unit adequate to meet the wintering needs of deer without acquiring additional land from the private sector. The percent of the winter range that is administered by the BLM and USFS is respectively 30% and 47%. The Forest Service is responsible for managing almost all of the summer range (83%).

A history of heavy overgrazing by sheep and cattle is largely responsible for the present composition of most of the vegetative communities. Grazing began in the 1860's when the first settlers arrived in the Fremont Valley. Cattle, horses, and sheep grazed unregulated and range conditions deteriorated as herds increased. The result was overuse of the valuable cool-season grasses and forbs and degradation of the range in general. Even after the inception of the Forest Reserve (the predecessor to the Forest Service) in 1906, the situation worsened until livestock numbers peaked in 1924. Although overgrazing still occurs in many areas, grazing restrictions and management plans have been implemented on both Forest Service and BLM lands. Range conditions are improving in most areas.

Browse species increased as the competition from grasses and forbs was reduced by the heavy grazing. The result was large areas of deer winter range with abundant browse forage. However, good spring-fall deer range or transition range is lacking. During these seasons, deer seek succulent green grasses and forbs. Because the herbaceous component is inadequate, depredation occurs on private croplands, especially alfalfa fields. The DWR is working with the other agencies to improve spring-fall ranges with chaining, spraying, harrowing, and/or seeding projects.

Mining activities are nonexistent on the area, but gas and oil exploration and road building are current land management concerns. There is presently a moderately high density of roads on the area. Although off-road use of vehicles is prohibited, ORV's and four-wheel drive vehicles can go almost anywhere and new roads are being created each year. Winter traffic and the increase of unregulated winter recreation will have a negative impact on big game.

Wildlife Management Unit Objectives

The current wildlife management objectives are to achieve a target winter herd size of 6,200 deer (stabilize the west side of the unit and increase the east side). A post season herd composition 15 bucks to 100 does with 30% of the bucks being 3 point or better will be maintained. The target winter herd size for elk is 4,800 for subunits 25A Fish Lake and 25B Thousand Lake. A herd composition of a minimum 8 bulls to 100 cows with 4 of those bulls being 2 ½ years of age or older will be maintained.

The Fish Lake deer unit is part of the Parker Mountain antelope unit. One hundred and twenty-nine pronghorns were transplanted to the Parker unit from Montana in 1964 and 1965. Because this antelope unit has done so well, antelope from this expanding herd have been transplanted to other areas of the state. Additionally, the yearly harvest has increased from 36 in 1974 to 133 in 1984 ???need data after 1984??? with an average hunter success rate of 93%. The Fish Lake part of the Parker Mountain antelope unit supports a modest portion of the total herd, but will likely become more important if the herd continues to expand.

Trend Study Site Description

Twelve trend study sites were placed within the Fish Lake unit in 1985. Eleven of the 12 study sites occur on deer and elk winter range and one on summer range. In 1991, all sites were reread and 3 additional summer or transitional range sites were established at East Tidwell #25A-12, Ox Spring #25A-13, and Row of Pines Exclosure #25A-14. These 15 trend studies were read again in 1999. Two additional study sites were established in 1999, within the Row of Pines exclosure. One samples the livestock exclosure (#25A-19) and the other samples the total exclosure (#25A-20). Data from these sites can be compared with the Row of Pines exclosure trend study site #25A-14, which samples the area outside of the exclosure.

SUMMARY

WILDLIFE MANAGEMENT UNIT 25A (44) - PLATEAU, FISH LAKE

Twelve trend study sites on the Fish Lake Unit were originally established in 1985. These were reread in 1991 and an additional 3 summer or transitional sites were established. All 15 sites were reread in 1999 and two new sites were established within the Row of Pines Exclosure. Overall, the trend study sites show a lack of forbs. The only sites with a moderately high proportion of forbs in the understory occur at East Tidwell (#25A-12) a high elevation summer range site, and Ox Spring (#25A-13) which samples a prescribed burn. Both of these sites currently display a downward trend with respect to forbs. Forb cover for the other 13 trend study sites averages only 1.7% . Seven of these sites show declining trends for forbs while the other 6 are stable.

Of the 10 winter range sites on the Fish Lake unit, three sites, Triangle Mountain (#25A-1) and Black Mountain (#25A-2), and Durfee Homestead (#25A-4) monitor pinyon-juniper chainings on deer and elk winter range. The trend study at Lower Dog Flat (#25A-8) samples a chaining on mountain big sagebrush. The Triangle and Black Mountain studies have little browse on site.

Other winter range sites which sample mostly sagebrush include; Sage Flat (#25A-3), Praetor Slope (#25A-5), Row of Pines (#25A-9), Cedarless Flat (#25A-10), Forsyth Reservoir (#25A-11), and Tommy Hollow (#25A-16). The trend study at Evans Reservoir (#25A-7) samples primarily pronghorn range but it is also used by deer and elk in the winter.

Four trend study sites sample deer and elk summer and/or transitional range on the Fish Lake unit. These include; East Tidwell (#25A-12), Ox Spring (#25A-13), Row of Pines Exclosure (#25A-14), and Elk Camp (#25A-18).

TREND SUMMARY

Site	Category	1994	1999
25A-1 Triangle Mountain	soil	+	0
	browse	+	0
	herbaceous understory	+	0
25A-2 Black Mountain	soil	-	0
	browse	-	0
	herbaceous understory	+	0
25A-3 Sage Flat	soil	0	0
	browse	+	0
	herbaceous understory	-	-
25A-4 Durfee Homestead	soil	-	0/+
	browse	-	-
	herbaceous understory	-	0

Site	Category	1994	1999
25A-5 Praetor Slope	soil	0/-	0
	browse	-	0
	herbaceous understory	0	0
25A-7 Evans Reservoir	soil	-	0/+
	browse	-	-
	herbaceous understory	+	-
25A-8 Lower Dog Flat	soil	0	0
	browse	0	0
	herbaceous understory	0	0
25A-9 Row of Pines	soil	-	+
	browse	-	-
	herbaceous understory	0	+
25A-10 Cedarless Flat	soil	0	0
	browse	+	0
	herbaceous understory	+	-
25A-11 Forsyth Reservoir	soil	0	0
	browse	+	0
	herbaceous understory	0	-
25A-12 East Tidwell	soil	est	0
	browse	est	0
	herbaceous understory	est	-
25A-13 Ox Spring	soil	est	0
	browse	est	+
	herbaceous understory	est	-
25A-14 Row of Pines Exclosure	soil	est	0/+
	browse	est	-
	herbaceous understory	est	+
25A-16 Tommy Hollow	soil	0/+	0/+
	browse	-	+
	herbaceous understory	0	-

Site	Category	1994	1999
25A-18 Elk Camp	soil	-	0/+
	browse	-	+
	herbaceous understory	0	0
25A-19 Row of Pines Livestock Exclosure	soil		est
	browse		est
	herbaceous understory		est
25A-20 Row of Pines Total Exclosure	soil		est
	browse		est
	herbaceous understory		est

(-) = downward,(+) = upward,(0) = stable, (0/+) = stable to slightly upward, (0/-) = stable to slightly declining, (est) = trend study established